SECTION II

2011

FIRST AID

RULES

2011 FIRST AID CONTEST RULES

INDEX

Section II

<u>Title</u>	<u>Page</u>
Rules Governing the 2011 First Aid Contest	1
Scorecard A Discounts	7
Interpretations of Scorecard B	
(Artificial Ventilation/Cardiopulmonary Resuscitation)	11
Skill Sheets	
Initial Assessment	14
Patient Assessment	15
One-Person CPR (Manikin Only)	17
Two-Rescuer CPR (Manikin Only)	19
Mouth-to-Mask Resuscitation	23
Airway Obstruction	24
Sucking Chest Wound	28
Life Threatening Bleeding	29
Tourniquet	30
Dressings and Bandaging - Open Wounds	31
Two-Person Log Roll	33
Splinting	34
One Rescuer Blanket Drag	42
Ground Lifts	43
Shirt Drag	44
Establishing Airway - Suspected Cervical Spine (Neck) Injury	45
Shock	
Immobilization	46
Burns	50
Frostbite	52
Late or Deep Cold Injury	
Hyperthermia	54

RULES GOVERNING THE 2011 NATIONAL FIRST AID CONTEST

First Aid rules were designed as a training tool for first aid teams. They were developed for contest purposes only. Discretion should be used in actual mine emergency situations.

- 1. Members of First Aid Teams must be bona fide employees of the mining industry. Teams shall furnish their own recording manikin, and all other materials listed in G Miscellaneous.
- 2. A team shall consist of two members and a patient. A team shall not use the same patient for multiple teams. Bystander(s) may only assist in supporting, lifting, or moving the patient. If the problem requires a bystander(s), they will be provided. Bystander(s) will be positioned at the field and will be identified as a bystander with labels or name tags and BSI precautions will be in place. A team shall work two problems and the scores shall be combined to determine the team's final standings.
- 3. Each team entering the contest will draw a number to determine the order of the performance at the time of registration. Teams sharing equipment must notify the registrar upon registration, so that these teams will not be working at the same time and enough time is allowed for inspection of equipment prior to second team using the equipment.
- 4. Each participating team must be under guard before the start of the contest. Any team or team member receiving information concerning a contest problem prior to arriving at the working area will, be disqualified by the Chief Judge and Director.
- 5. No practicing will be allowed on the field before the beginning of the Contest. No reference books or training material will be permitted in the working area during the working or reading of the problems.
- 6. Only designated officials will be allowed to communicate with teams while teams are working.
- 7. All Procedures shall be performed in the order listed: Skill sheets supersede First Aid Rules which supersede Brady First Responder eighth Edition by Bergeron and Le Baudour.
- 8. Contest officials will designate spaces (15 feet by 15 feet minimum) for teams to work. All equipment (except manikin) will be kept behind a

baseline designated by a Contest Official. All problems will be worked in the designated area which shall contain only the judges and the contesting teams. The manikin will be located within the designated space.

- 9. All team members and patient shall be dressed alike. Shoes need not be identical. The patient may wear shorts even if the team members are wearing pants. The pants and shorts shall be the same color.
- 10. The Timekeepers shall explain to the team the timing devices used. Judges will require a signature and team number on the sample CPR tape at this time. (Check shallow breaths, deep and shallow compressions.)
- 11. Problems will be kept in unsealed envelopes, retained by the judges, and given to the team after the timing device has been started. Judges shall place the patient in the required position as stated in the problem to be worked.
 - a. The team's material and equipment (jump kits, splints, etc.) may not be assembled or donned (excluding BSI) until after the timing device is started. The manikin may be placed in the designated area prior to starting the timing device.
 - b. The working time for a problem will start when the team starts the timing device.
 - c. If props are to be utilized during the working of the problem, such props must be readily available to the working teams and in working condition. These props must be identified by the judges to the team members prior to starting the timing device and must be located within the designated working area. Props will not be utilized in lieu of first aid equipment for treatment of patient(s). Props will be limited to items related to communication and mechanism of injury for effects unless skill sheets are provided. Props shall be within the application of the skill sheets used for treatment of the injury/conditions.

A barrier device must be used when contacting manikin. The face masks/shields may be removed when the team is required to give artificial ventilation, CPR, inflating splints, etc.

12. Injuries/conditions requiring treatment will be identified by cards, envelopes or labels attached to the patient at or as near the location of the injury as possible on the outside of the clothing, be identified by simulated wounds, or be in the reading of the problem. Signs, symptoms or mechanisms of injury

may be used. If signs and symptoms are used, all signs and symptoms shall be identified by cards, envelopes or labels placed on patient. All signs and symptoms will be given to the teams in writing. Wounds that are listed in the reading of the problem shall also be placed on patient. (Exception: If the wound is on the eyelid or an impaled object in the eye, the label will NOT be placed on the eye, but in an obvious area near the eye.)

During the initial or patient assessment, teams may find an envelope attached to the patient or be provided an envelope by the judges which contains patient information that needs immediate attention. If repositioning of patient is required for treatment, patient must be placed in the proper position prior to treatment. Upon completion of treatment of these conditions, the initial or patient assessment will be resumed at the point where team left off. The patient will already be marked upon arrival of the team.

Since spinal stabilization must be taken as outlined in Initial Assessment, spinal injuries will be stated in the reading of the problem and not marked on the patient. Sucking chest wounds and life-threatening bleeding shall be stated in the reading of the problem and shall be marked on the patient.

13. Lettering on the cards and/or labels will be at least 1/4-inch in height.

Example:

2-INCH WOUND ON FOREHEAD

- 14. The problem will end and teams will stop the timing device when all conditions have been located, treated, and work area has been cleaned. The timekeeper/judge must time the problem in minutes and seconds and consult with the team upon completion of the problem to verify the time.
- 15. After stopping the timing device, the team will inform the judges that the patient is ready for inspection. Team members will remain with the patient until released by the judges. Any physical treatment(s) not performed, i.e. bandage, splint will be pointed out to team at this time.
- 16. The calculated time will be determined by Contest Officials by averaging the working time of all teams participating in the Contest (1 discount per 3 minute overtime or fraction thereof).
- 17. The accumulation of individual discounts within a procedure shall not exceed the discounts for failure to perform that procedure. (Example AV, CPR, etc.)

A. Ties

In the event of ties in the contest, Scorecard A (First Aid Procedures and Critical Skills) discounts will be the first tie breaker, Scorecard B (AV/CPR) discounts will be the second tie breaker and actual working time, in minutes and seconds, of the team will be the third tie breaker.

B. Miscellaneous

Teams will be notified by posting when they may review their score cards. Within one hour of posting, team members and trainer shall report to a designated location. Once notified, team members and the trainer shall have 20 minutes for reviewing each problem, the judge's skill sheets and scorecards to prepare any protest. All protests shall be in writing and shall state the discount in question, the scorecard involved, and their reference proof in the rule book or Brady book to support their protest or the protest will not be considered. All protests will be considered by the Final Appeals Committee. A decision by the Final Appeals Committee is binding and final. Protest sheets will be furnished to the teams by the Judges for the recording of rules infractions or discounts assessed to teams. Judges shall remain available until released.

MATERIALS LIST

Participants will be required to furnish their own materials. Teams must provide the minimum equipment. Listed below is the minimum equipment required.

- 24 Triangular Bandages
- 6 Adhesive compresses
- 24 Sterile gauze, (4"x4") and/or 4" Compresses
- 6 Roller Bandages
- 2 Blankets
- 1 Scissors, EMT Utility
- 6 Pairs of Examination Gloves
- 2 Mask/face shields or masks and goggles combination meeting blood borne pathogen requirements
- 2 Heat Pack Simulated
- 2 Cold packs Simulated
- 2 Oval Eye Pads
- 1 Pen and paper set
- 1 Elevating device
- 1 Recording manikin
- 2 Barrier devices with one-way valve for performing AV/CPR
- 1 White bag (i.e. plastic garbage bag)
- 1 Compliment of splints (may be pre-padded but not assembled)
- 1 Long back board with straps (Aluminum, Wood, etc.)
- 2 Air splints (1 full arm and 1 full leg)
- 1 Packet Sugar/Tube Instant Glucose (for Diabetic Purposes)
- 1 Adhesive Tape
- 1 Burn Sheet, Sterile (40" x 80" minimum)
- 1 Rigid Extrication Collar
- 4 Trauma Dressings (minimum of 10" X 30")
- 1 Eye Shield/Cup
- 1 Pen Light
- 2 Tourniquets
- 2 Towels
- 1 Pillow
- 1 Occlusive Dressing
- 2 Sticks, Wooden Dowels or equivalent
- 1 Watch/Timing Device
- 1 Headset (long spine board)
- 1 500 ml sterile water

Compliment of Straps for Long Spine Board (buckle straps, spider straps, etc.)

Problems will be designed from the Revised Skill Sheets approved by the Rules Committee.

Manikins will be furnished by teams for performing procedures and critical skills pertaining to all ventilation problems, cardiac arrest problems. Signal boxes on manikins will be covered during the working of the problem. NOTE: Live patients will **not** be used in any CPR or ventilation problems.

Under no circumstances will videotape recordings or photos be introduced as supplementary material for consideration of the appeal.

SCORECARD A DISCOUNTS

1.	violations of general rules not covered on scorecards5 each infraction
2.	All life-threatening conditions shall be located and started before patient assessment can begin. (Life threatening conditions will be considered a patient having any one or more of the following conditions: breathing difficulties, no pulse, spinal injury, skull fracture, a sucking chest wound or life threatening bleeding) 20
	Patient assessment can begin after all life-threatening conditions have been located and treatment started. Environmental and Medical Emergencies can be treated anytime during the working of the problem after initial assessment.
3.	When the team encounters life-threatening bleeding, no work other than controlling bleeding shall be done until bleeding is controlled. Bleeding is controlled when notified by the Judge (judge makes a statement that bleeding is controlled). If treatment has been started and one team member can complete that treatment, the other team member may continue to work10 each infraction
4.	During the course of the problem, teams may encounter a card, envelope or label stating various conditions. Upon completion of treatment of these conditions, resume patient assessment at the point where team left off5 each infraction
5.	Patient cannot talk, direct, or assist unless stated in the problem. (Reactionary or unintentional movements by the patient should not be discounted) 5 each infraction
6.	The bystander must be shown the correct method of support2
	The bystander must be shown the correct method of support and maintaining the open airway by a team member or members any time during the working of the problem, but before taking support.
7.	Handling of a patient by a team or team member in such a manner that could compromise condition of the patient. Examples: Mishandling extremities, etc.) 5 each infraction
8.	All injuries and/or conditions shall be treated (example: wound, fracture, frostbite)20 each infraction

- 9. Preassembly of material. ___5
- 10. Failure to perform a required critical skill. Each CRITICAL SKILL shall be performed as identified on the skill sheets. ___2 each infraction
- 11. During patient assessment, failure to verbally state the location physically examined and each condition found. ___1 each infraction
- 12. Working out of order (assessment, procedure, critical skill). ____2

Low Priority

Teams will systematically conduct the patient assessment according to procedures of the patient assessment skill sheet. Each area of the body shall be examined in its entirety prior to treating injuries in that area (except taking support). All injuries must be treated on the area being examined prior to moving to the next area to be examined. The sling for fractured ribs may be applied after upper extremity has been surveyed/treated. If treatment has been started and can be completed by one team member (except injuries requiring a backboard), the other team member may continue the examination to the next area and begin treatment. (Systemically, legs are treated before the arms.

High Priority

Teams will systematically conduct initial assessment, treating all lifethreatening injuries/conditions. When one or more of the conditions listed in rule 24 is encountered the team will perform a rapid patient assessment according to the patient assessment skill sheet. To perform a rapid patient assessment, teams will examine each area of the body in its entirety, verbalizing critical skills and injuries/conditions found. No treatment is required for non life-threatening conditions/injuries found during the rapid patient assessment. Patient is then prepared for transport and/or transported as required by written problem. To prepare for transportation, a team will be required to properly place and secure a patient on a backboard as outlined in the skill sheets, cover with a blanket and lift patient from the floor. After the patient has been lifted from the floor, the team will verbalize – "transporting patient".

13. Failure to follow written instructions.____5

14.	Teams shall not pad around the head and neck of the patient, for a suspected spinal injury, before the patient is placed onto the backboard1
15.	Teams shall tuck the tails of bandages1 (discount only one (1) point when three or more tails of bandages are not tucked)
16.	All material (except manikin) shall be placed behind baseline prior to stopping the timing device. After completing the problem the work area shall be cleaned of ALL material (except manikin), including the infectious waste, which shall be placed in a white trash bag provided by the team. When all materials have been placed behind baseline, a team member shall stop the timing device. The judges and First Aid team will verify the working time upon completion of the problem. 1
17.	Protective equipment must be donned prior to patient contact (gloves, masks, and eye protection - eyeglasses are acceptable). Only BSI may be donned prior to starting the timing device5 each infraction
18.	Gloves shall be changed if there would be contamination because of a glove tear or due to other contamination. For contest purposes only, gloves must be changed if there would be provider contamination because of a glove tear. 2 each infraction (New glove may be placed over original glove)
19.	The broken-back board splint may be preassembled and padded. Other splints may be prepadded but not assembled. (Cravat bandages cannot be preassembled on the back board, except for tying padding.)5
20.	Failure to take support of a fracture or dislocation (not supporting fracture or dislocation)10

- Support of Extremities Above and below the fracture or dislocation
- Support of Hip Both sides of the fracture or dislocation
- Support for spinal injury Stabilization of neck/Modified Jaw Trust
- Support for skull fracture Stabilization of neck/Modified Jaw Trust
- No support for fractured ribs,
- No support of fractures/dislocations of nose, jaw, fingers, and toes

21.	Support of fractures and/or dislocations shall not be broken or released5
	When changing support, if support is broken, this discount applies. Change of support can be done as many times as the team desires provided the support is not broken.
	Support for upper extremity fractures/dislocations shall be maintained until the sling is completed. Discount if support of fracture and/or dislocation is released by support person before sling is completed.
	Sling and swath not required with air splints.
22.	Fractures/dislocations shall be supported prior to bandaging injuries. Once the extremity has been assessed, fractures/dislocations must be supported prior to bandaging injuries on the extremity5
	During initial and patient assessment, teams must physically support/stabilize fractures and dislocations that require support as they are found. When the fracture/dislocation is on an extremity and support has been taken, the team must complete the examination on the extremity treating other injures prior to splinting the fracture/dislocation.
23.	Not applying sling for upper extremity wound1
	Triangular slings are required for all wounds of upper extremities, including shoulder and armpit wounds. Slings will not be required for upper extremity burns/deep cold injuries. However, if a burn/deep cold injury and wound and/or fracture/dislocation are present on the same upper extremity, a sling shall be applied. Slings will be applied on upper extremities with injuries after all injuries of the extremity have been treated. Slings are not required when the extremity is supported/secured by an air splint or full arm splint.
24.	Failure to determine high priority patients10
	A high priority patient shall be transported immediately. This presents a load and go situation. High priority conditions are unresponsiveness, breathing difficulties, life threatening bleeding or severe shock, chest pain, no pulse, spinal injury, skull fracture, a sucking chest wound and any severe abdominal, pelvic or spinal pain. Any one or more of the above conditions must be clearly stated in the reading of the problem or written information presented to the team during the working of the problem.
25.	Failure to start timing device 2 discounts

INTERPRETATIONS OF SCORECARD B ARTIFICIAL VENTILATION/CARDIOPULMONARY RESUSCITATION

1.	Failure to determine unresponsiveness (according to Critical Skill Sheet)1
2.	Failure to call for help1
3.	Failure to open airway1
4.	Failure to use proper maneuver to open airway (using head-tilt/chin-lift maneuver when jaw-thrust should be used, vice versa)1
5.	Failure to assess breathlessness within 10 seconds1
6.	Failure to use one-way valve barrier device when ventilating manikin1
7.	Failure to give initial 2 breaths1
	a. Volume shall be at least .8 liters (through .7 liter line on new manikins). Over inflation shall not be discounted1
8.	Failure to use mouth-to-nose ventilation when required1
9.	Failure to keep body and head in line, if spinal injury exists1
10.	Failure to use tongue jaw lift, cross-finger technique, or finger sweep when required1
11.	Failure to reposition head when airway obstruction is suspected1
12.	Failure to give abdominal thrusts or chest thrusts when required1
13.	Failure to check pulse prior to giving compressions1
14.	Failure to assess pulse for 5-10 seconds1
15.	Failure to correctly locate the carotid pulse1
16.	Failure to verbalize absence of pulse1

Cardiopulmonary Resuscitation

1.	Failure to give AV/CPR when required20 (Maximum of 3 sets AV/CPR or combination thereof)
2.	Failure to locate landmark for giving compressions1
3.	Failure to make parallel axis with heels of hands1
4.	Allowing fingers to rest on chest1
5.	Compressions. Discounts shall apply to each set.
	a. Timing. 30 compressions shall be delivered within 23 seconds1
	b. Depth. Compression depth shall be between the two lines for 60-80 pounds pressure1
	c. Number required. A total of 30 compressions shall be made each cycle1
	d. Release of upstroke. The release line shall be straight1
	e. Rate. Compressions shall be made at the rate of 100 per minute1
6.	Failure to maintain hand contact with manikin when releasing pressure during compressions1 (This does not apply between cycles).
7.	Failure to give 2 breaths between each cycle of compressions1
	a. Timing (not completing breaths and returning to compressions in 4-7 seconds (This will be measured from the end of last down stroke to the start of the first down stroke of the next cycle.)1
	b. Volume shall be at least .8 liters (through .7 liter line on new manikins). Over inflation shall not be discounted1
8.	Failure to give 5 cycles of 30 compressions and 2 breaths for each set of CPR (point of first down stroke to peak of last breath). (A cycle is 30 compressions and two (2) ventilations. A set is 5 cycles.)1
9.	Failure to assess pulse within 10 seconds after each set of CPR1 (one discount per set)

10.	Failure to give five (5) abdominal thrusts when airway obstruction is suspected1
11.	Failure to perform CPR as stated in the problem. Too many or too few compressions can be detrimental to patient1
12.	Failure for the number of Rescuer/Rescuers to perform CPR as stated in the problem. Team performing One-Person CPR when Two-Person CPR is required and vice versa3 (When problem states "Two-Rescuer CPR", two people are required to perform CPR as listed in Two-Rescuer CPR skill sheets.)
13.	Failure to begin with compressions after pulse check is completed or when changing rescuers1
14.	Failure of rescuers to change positions in 5 seconds or less when performing two-person CPR1
15.	Failure of rescuer to state that patient has a pulse when CPR is completed1
	Artificial Ventilation
1.	Failure to give artificial ventilation 20 (Maximum of 3 sets AV/CPR or combination thereof)
2.	Failure to give 10-12 breaths in each 58-62-second period1 (1 minute of AV = 1 set)
3.	Failure to provide a breath volume of at least .8 liters (through .7 liter line on new manikins). Over inflation shall not be discounted1
4.	Failure of rescuer to check for return of breathing and pulse when artificial ventilation is completed1
5.	Failure of rescuer to state that patient is breathing and has a pulse when artificial ventilation is completed1

INITIAL ASSESSMENT

PROCEDURES

CRITICAL SKILL

1. SCENE SIZE UP	*A. Observe area to ensure safety *B. Call for help
2. MECHANISM OF INJURY	*A. Determine causes of injury, if possible *B. Ask patient (if conscious) what happened
3. INITIAL ASSESSMENT	*A. Verbalize general impression of the patient(s) *B. Determine responsiveness/level of consciousness (AVPU) Alert, Verbal, Painful, Unresponsive *C. Determine chief complaint/apparent life threats
4. ASSESS AIRWAY AND BREATHING	 A. Correctly execute head-tilt/chin-lift or jaw thrust maneuver, depending on the presence of cervical spine (neck) injuries B. Look, listen, and feel for breathing (3-5 seconds) C. If present, treat sucking chest wound
5. ASSESS FOR IMMEDIATE LIFE THREATENING CONDITIONS	 A. Check for presence of a carotid pulse (5-10 seconds) B. If present, control life threatening bleeding C. Start treatment for all other life threatening injuries/conditions (reference Rule 2).
6. DETERMINE PRIORITY OF PATIENT	 *A. Teams must make statement to judge, identifying whether patient is low priority or high priority load and go. *B. Teams must make statement to judge, "Removing clothing, exposing and cleaning wound surface(s)"

HIGH PRIORITY: Rapid Patient Assessment treating all life threats Load and Go. If the treatment interrupts the rapid trauma assessment, the **assessment** will be completed at the end of the **treatment**.

LOW PRIORITY: Detailed Patient Assessment treating all injuries and conditions and prepare for transport.

14

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

PATIENT ASSESSMENT

PROCEDURES CRITICAL SKILL

TROCEDORES		CHITCHE SKILL
1. HEAD		*A. Check head for DOTS: Deformities, Open wounds, Tenderness and Swelling *B. Check and touch the scalp *C. Check the face *D. Check the ears for bleeding or clear fluids *E. Check the eyes for any discoloration, unequal pupils, reaction to light, foreign objects and bleeding *F. Check the nose for any bleeding or drainage *G. Check the mouth for loose or broken teeth, foreign objects, swelling or injury of tongue, unusual breath odor and discoloration
2. NECK		*A. Check the neck for DOTS *B. Inspect for medical ID
3. CHEST		*A. Check chest area for DOTS *B. Feel chest for equal breathing movement on both sides *C. Feel chest for inward movement in the rib areas during inhalations
4. ABDOMEN		*A. Check abdomen (stomach) for DOTS
5. PELVIS		*A. Check pelvis for DOTS *B. Inspect pelvis for injury by touch (Verbally state inspection of crotch and buttocks areas)
6. LEGS	L R	 *A. Check each leg for DOTS B. Inspect legs for injury by touch C. Unresponsive: Check legs for paralysis (pinch inner side of leg on calf) *D. Responsive: Check legs for motion; places hand on bottom of each foot and states "Can you push against my hand?" *E. Check for medical ID bracelet

15

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

7. ARMS	L	R	*A. B. C. *D.	Check each arm for DOTS Inspect arms for injury by touch Unresponsive: Check arms for paralysis (pinch inner side of wrist) Responsive: Check arms for motion (in a conscious patient; team places fingers in each hand of patient and states "Can you squeeze my fingers?" Check for medical ID bracelet
8. BACK SURFACES	[<u> </u>	*A.	Check back for DOTS

DOTS: Deformities, Open Wounds, Tenderness and Swelling

16

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

ONE-PERSON CPR (MANIKIN ONLY)

PROCEDURES CRITICAL SKILL

1. ESTABLISH UNRESPONSIVENESS	 A. Tap or gently shake shoulders *B "Are you OK?" C. Determine unconsciousness without compromising possible cervical spine (neck) injury *D. "Call for help"
2. ESTABLISH AIRWAY	A. Kneel at the patient's side near the head B. Correctly execute head-tilt/chin-lift or jaw thrust maneuver depending on the presence of cervical spine injuries
3. MONITOR PATIENT FOR BREATHING	A. Look, listen, and feel for breathing (within 10 seconds)
4. VENTILATION PATIENT	 A. Place barrier device (pocket mask/shield with one way valve) on manikin B. Give 2 breaths 1 second each C. Each breath - minimum of .8 liters (through .7 liter line on new manikins)
5. PULSE CHECK	 A. Correctly locate the carotid pulse - on the side of the rescuer, locate the patient's windpipe with your index and middle fingers and slide your fingers in the groove between the windpipe and muscle in the neck B. Check for presence of carotid pulse for 5 to 10 seconds *C. Absence of pulse
6. POSITION FOR COMPRESSIONS	 A. Locate the compression point on the breastbone between the nipples B. Place the heel of one hand on the compression point and the other hand on top of the first so hands are parallel C. Do not intentionally rest fingers on the chest D. Keep heel of your hand on chest during and between compressions

17

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

7. DELIVER CARDIAC COMPRESSION	 A. Give 30 compressions B. Compressions are at the rate of 100 per minute (30 compressions delivered within 23 seconds) C. Down stroke for compression must be on or between compression lines D. Return to baseline on upstroke of compression
7. VENTILATIONS BETWEEN COMPRESSIONS	 A. Give 2 breaths 1 second each B. Each breath - minimum of .8 (through .7 liter line on new manikins) C. Complete breaths and return to compressions in 4-7 seconds (This will be measured from the end of last down stroke to the start of the first down stroke of the next cycle.)
9. CONTINUE CPR FOR TIME STATED IN PROBLEM	 A. Provide 5 cycles of 30 chest compressions and 2 rescue breaths B. To check for pulse, stop chest compressions for 5-10 seconds after the first set of CPR C. Rescuer opens airway and looks, listens, and feels for adequate breathing or coughing D. Rescuer checks for a carotid pulse E. If no signs of circulation are detected, continue chest compressions and breaths and check for signs of circulation after each set F. A maximum of 10 seconds will be allowed to complete ventilations and required pulse checks between sets (this will be measured from the end of the last down stroke to the start of the first down stroke of the next cycle)
9. CHECK FOR RETURN OF PULSE	A. After providing required CPR (outlined in problem), check for return of pulse (within 10 seconds)*B. "Patient has a pulse."

18

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

TW0-RESCUER CPR (NO SPINAL INJURY - MANIKIN ONLY)

PROCEDURES

CRITICAL SKILL

1. RESCUER 1 - ESTABLISH UNRESPONSIVENESS		 A. Tap or gently shake shoulders *B. "Are you OK?" C. Determine unconsciousness without compromising cervical spine (neck) injury *D. "Call for help"
2. RESCUER 1 - ESTABLISH AIRWAY		A. Kneel at the patient's side near the head B. Correctly execute head-tilt/chin-lift maneuver
3. RESCUER 1 - MONITOR PATIENT FOR BREATHING		A. Look, listen, and feel for breathing (within 10 seconds)
4. RESCUER 1 - VENTILATE PATIENT	0 0 0	 A. Place barrier device (pocket mask/shield with one-way valve) on manikin B. Give 2 breaths 1 second each C. Each breath - minimum of .8 (through .7 liter line on new manikins)
5. RESCUER 1 - CHECK FOR CAROTID PULSE		 A. Correctly locate the carotid pulse - on the side of the rescuer, locate the patient's windpipe with your index and middle fingers and slide your fingers in the groove between the windpipe and the muscle in the neck B. Check for presence of carotid pulse for 5 to 10 seconds *C. Absence of pulse
6. RESCUER 2 - POSITION FOR COMPRESSIONS		 A. Locate the compression point on the breastbone between the nipples B. Place the heel of one hand on the compression point and the other hand on top of the first so hands are parallel. Do not intentionally rest fingers on the chest. Keep heel of your hand on chest during and between compressions.

19

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

7. RESCUER 2 - DELIVER CARDIAC COMPRESSION	 A. Give 30 compressions B. Compressions are at the rate of 100 per minute (30 compressions delivered within 23 seconds) C. Down stroke for compression must be on or between compression lines D. Return to baseline on upstroke of compression
8. RESCUER 1 - VENTILATIONS BETWEEN COMPRESSIONS	 A. Give 2 breaths 1 second each B. Each breath - minimum of .8 (through .7 liter line on new manikins) C. Complete breaths and return to compressions in 4-7 seconds (This will be measured from the end of last down stroke to the start of the first down stroke of the next cycle.)
9. CONTINUE CPR FOR TIME STATED IN PROBLEM	 A. Provide 5 cycles of 30 chest compressions and 2 rescue breaths B. To check for pulse, stop chest compressions for 5-10 seconds after the first set of CPR C. Rescuer at patient's head maintains airway and looks, listens, and feels for adequate breathing or coughing D. The rescuer at the patient's head shall feel for a carotid pulse E. If no signs of circulation are detected, continue chest compressions and breaths and check for signs of circulation after each set F. A maximum of 10 seconds will be allowed to complete ventilations and required pulse checks between sets (this will be measured from the end of the last down stroke to the start of the first down stroke of the next cycle
10. CHANGING RESCUERS	A. Change of rescuers shall be made in 5 seconds or less and will be completed as outlined in the problem. Team must switch every 5 cycles in less than 5 seconds.
11. CHECK FOR RETURN OF PULSE	A. After providing required CPR (outlined in problem), check for return of pulse (within 10 seconds)*B "Patient has a pulse."

20

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

TWO-RESCUER CPR (WITH SPINAL INJURY - MANIKIN ONLY)

PROCEDURES

CRITICAL SKILL

1. RESCUER 1 - ESTABLISH UNRESPONSIVENESS	A. Tap or gently shake shoulders*B. "Are you OK?"C. Determine unconsciousness without compromising cervical spine (neck) injury*D. "Call for help"
2. RESCUER 2 - ESTABLISH AIRWAY	A. Kneel at the patient's head B. Correctly execute jaw thrust maneuver
3. RESCUER 1 – MONITOR PATIENT FOR BREATHING	A. Look, listen, and feel for breathing (within 10 seconds)
4. RESCUER 2 - VENTILATE PATIENT	 A. Rescuer 1 should place barrier device (pocket mask/shield with one-way valve) on manikin. (OPTION 1: When spinal injury is present, Rescuer No. 2 can hold barrier device on manikin after Rescuer No. 1 correctly places the device over the mouth and nose.) (OPTION 2: Rescuer 1 can place the device on the manikin each time patient is ventilated) B. Rescuer 2 gives 2 breaths 1 second each C. Each breath - minimum of .8 (through .7 liter line on new manikins)
5. RESCUER 1 - CHECK FOR CAROTID PULSE	 A. Correctly locate the carotid pulse - on the side of the rescuer, locate the patient's windpipe with your index and middle fingers and slide your fingers in the groove between the windpipe and the muscle in the neck B. Check for presence of carotid pulse for 5 to 10 seconds *C. Absence of pulse
6. RESCUER 1 - POSITION FOR COMPRESSIONS	 A. Locate the compression point on the breastbone between the nipples B. Place the heel of one hand on sternum the compression point and the other hand on top of the first so hands are parallel C. Do not rest fingers on the chest Keep heel of your hand on chest during and between compressions

21

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

7. RESCUER 1 - DELIVER CARDIAC COMPRESSION	 A. Give 30 compressions B. Compressions are at the rate of compressions delivered within C. Down stroke for compression compression lines D. Return to baseline on upstrok 	n 23 seconds) must be on or between
8. RESCUER 2 - VENTILATIONS BETWEEN COMPRESSIONS	 A. Give 2 breaths 1 second each B. Each breath - minimum of .8 new manikins) C. Complete breaths and return seconds (This will be measure down stroke to the start of the the next cycle.) 	to compressions in 4-7 ed from the end of last
9. CONTINUE CPR FOR TIME STATED IN PROBLEM	 A. Provide 5 cycles of 30 chest correscue breaths B. To check pulse, stop chest conseconds after the first set of C. C. Rescuer at patient's head main looks, listens, and feels for adcoughing D. The rescuer giving compression carotid pulse E. If no signs of circulation are decompressions and breaths and circulation after each set F. A maximum of 10 seconds will complete ventilations and requested between sets (this will be mean the last down stroke to the starstroke of the next cycle 	npressions for 10 PR ntains airway and equate breathing or ons shall feel for a etected, continue chest d check for signs of l be allowed to quired pulse checks issured from the end of
10. CHANGING RESCUERS	A. Change of rescuers shall be m and will be completed as outl must switch every 5 cycles in	ined in problem. Team
11. CHECK FOR RETURN OF PULSE	A. A final pulse check (3-5 secon the end of the last set of CPR *B. "Patient has a pulse."	ds) will be required at

22

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

MOUTH-TO-MASK RESUSCITATION

PROCEDURES CRITICAL SKILL

1.	ESTABLISH UNRESPONSIVENESS	 A. Tap or gently shake shoulders *B. "Are you OK?" C. Determine unconsciousness without compromising C-spine injury *D. "Call for help"
2.	ESTABLISH AIRWAY	A. Correctly execute head-tilt/chin-lift or jaw thrust maneuver depending on the presence of cervical spine (neck) injuries
3.	MONITOR PATIENT FOR BREATHING	A. Look, listen, and feel for breathing (within 10 seconds)
4.	VENTILATE PATIENT	 A. Place barrier device (pocket mask/shield with one-way valve) on manikin B. Ventilate patient 2 times at 1 second intervals each -minimum of .8 (through .7 liter line on new manikins)
5.	CHECK FOR CAROTID PULSE	 A. Correctly locate the carotid pulse (on the side of the rescuer) B. Check for presence of carotid pulse within 10 seconds *C. Presence of pulse
6.	VENTILATE PATIENT	 A. Place barrier device (pocket mask/shield with one-way valve on manikin B. Ventilate patient 10 to 12 times per minute. Each ventilation will be provided at a minimum of .8 (through .7 liter line on new manikins)
7.	CHECK FOR RETURN OF BREATHING AND PULSE	 A. After providing the required number of breaths (outlined in problem), check for return of breathing and carotid pulse within 10 seconds *B. "Patient is breathing and has a pulse"

23

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

AIRWAY OBSTRUCTION (MANIKIN ONLY) (VICTIM LOSES CONSCIOUSNESS)

PROCEDURES

CRITICAL SKILL

POSITIONING VICTIM AFTER LOSS OF CONSCIOUSNESS	A. Place victim in supine position (on their back)*B. "Call for help"
2. PERFORM FINGER SWEEPS	 A. Follow with opening mouth and finger sweep (Open mouth, grasping tongue and lower jaw with thumb and fingers, insert index finger of other hand down along inside cheek and deeply into throat in a hooking action) B. Grasp and remove foreign object if dislodged
3. OPEN AIRWAY	A. Correctly execute head-tilt/chin-lift or jaw thrust maneuver depending on the presence of cervical spine (neck) injuries
4. ATTEMPT VENTILATIONS	 A. Place barrier device on manikin B. Seal mouth and nose C. Attempt to give slow full breath D. If successful, deliver second slow full breath and check pulse E. If unsuccessful, continue sequence
5. DELIVER ABDOMINAL THRUST	 A. Straddle the victim's thighs B. Place heel of one hand against the victim's abdomen, in midline slightly above the navel and well below Xiphoid (point where ribs attach to the lower part of the breastbone) C. Place second hand on top of the first D. Deliver quick upward thrust E. Each thrust administered with intent of relieving obstruction F. Deliver 5 thrusts
6. PERFORM FINGER SWEEP	 A. Follow with opening mouth and finger sweep (open mouth, grasping tongue and lower jaw with thumb and fingers, insert index finger of other hand down along inside cheek and deeply into throat in a hooking action) B. Grasp and remove foreign object if dislodged

24

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

7. ATTEMPT VENTILATIONS	 A. Place barrier device on manikin B. Correctly make effort to administer slow full breath C. If successful, deliver second slow full breath and check pulse D. If unsuccessful, continue sequence
8. REPEAT SEQUENCE UNTIL SUCCESSFUL	A. Demonstrate ability to rapidly repeat sequence 1-7
9. ESTABLISH AIRWAY	 A. Correctly execute head-tilt/chin-lift or jaw thrust maneuver depending on the presence of cervical spine (neck) injuries B. Look, listen, and feel for the presence of breathing (within 10 seconds)
10. RE-EVALUATION OF PATIENT	*A. Determine the need to repeat the sequence B. Cease at the direction of the judge

25

AIRWAY OBSTRUCTION (UNCONSCIOUS VICTIM - WITNESSED)

CRITICAL SKILL

PROCEDURES

6. DELIVER

ABDOMINAL THRUST

1. INTIALLY ASSESS LEVEL OF CONSCIOUSNESS	 A. Tap or gently shake shoulders *B. "Are you OK?" C. Determine unconsciousness without compromising C-spine injury *D. "Call for help"
2. ESTABLISH AIRWAY	A. Correctly execute head-tilt/chin-lift or jaw thrust maneuver depending on the presence of cervical spine (neck) injuries
3. MONITOR PATIENT FOR BREATHING	A. Look, listen, feel for presence of breathing (within 10 seconds)B. Maintain open airway
4. ATTEMPT VENTILATION	 A. Place barrier device on manikin B. Seal mouth and nose C. Attempt to give slow breath *D. Identify if there is an obstruction
5. CHECK POSITIONING	A. Re-establish airway using correct method and procedure B. Identify continued presence of the obstruction
	A. Kneel astride the victim's thighs B. Place heel of one hand against the victim's

abdomen, in midline slightly above the navel and well below Xiphoid (point where ribs attach to the

the breastbone)

E. Each thrust administered with intention of relieving

C. Place second hand on top of the first

D. Deliver quick upward thrust

26

lower part of

obstruction

F. Deliver 5 thrusts

^{*} Teams may use the acronym "PMS" when checking pulse, motor function and sensory function

7. DELIVER CHEST THRUST (ONLY USED IN ADVANCED PREGNANCY OR MARKED OBESE VICTIM	 A. Kneel at side of victim B. Place heel of hand on breastbone between the nipples (CPR position) C. Place heel of other hand directly on top of the first hand D. Deliver slow distinct downward thrust, with each thrust administered with intent of relieving obstruction E. Deliver 5 thrusts
8. CHECK FOR FOREIGN BODY	 A. Follow with opening mouth and finger sweep (Open mouth, grasping tongue and lower jaw with thumb and fingers, insert index finger of other hand down along inside cheek and deeply into throat in a hooking action) *B. Grasp and remove foreign object if dislodged
9. ESTABLISH AIRWAY	A. Correctly perform head-tilt/chin-lift or jaw thrust maneuver depending on cervical spine (neck) injuries
10. ATTEMPT VENTILATION	 A. Correctly make effort to administer slow full breath B. Administer second slow full breath, if first successful and check pulse C. If unsuccessful repeat sequence of thrust, finger sweep and attempt to ventilate

27

SUCKING CHEST WOUND

PROCEDURES CRITICAL SKILL

1. EXPOSE WOUND	*A. Expose entire wound
2. SEAL WOUND AND	*A. Place occlusive dressing over wound (If occlusive dressing is not available use gloved hand)
CONTROL BLEEDING	B. Apply direct pressure as needed to stop the bleeding
	A. Keep patient calm and quiet
	*B. Explain to the patient what you are doing
	*C. Ensure dressing is large enough not to be sucked
	into the wound (two inches beyond edges of
	wound)
3. APPLY AN OCCLUSIVE DRESSING	D. Affix dressing with tape
	*E. Seal on three sides
	*F. Monitor patient closely for increasing difficulty breathing
DIVESSING	*G. Transport as soon as possible
	H. Keep patient positioned on the injured side unless other injuries prohibit
	*I. Reassess wound to ensure bleeding control
	*J. Assess level of consciousness(AVPU), respiratory status and patient response

NOTE: Alert, verbal, painful, unresponsive (AVPU)

28

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

LIFE-THREATENING BLEEDING

CRITICAL SKILL

	*A. Expose the wound. *B. Clear the wound surface
_	C Apply direct processrs with a glaved b

1. DIRECT PRESSURE AND ELEVATION	 *A. Expose the wound. *B. Clear the wound surface C. Apply direct pressure with a gloved hand D. Apply a dressing to wound (cover entire wound) and continue to apply direct pressure E. Elevate the extremity except when spinal injury exists *F. Bleeding has been controlled G. If controlled, bandage dressing in place
2. IF NOTIFIED THAT BLEEDING IS NOT CONTROLLED, PRESSURE POINTS SHALL BE UTILIZED	*A. Apply pressure to appropriate pressure point and notify judge verbally that bleeding is controlled (Apply pressure to blood vessels leading to area – in arm, press just below armpit; in leg, press against groin where thigh and trunk join.) B. If controlled, bandage dressing in place
3. IF NOTIFIED THAT BLEEDING IS NOT CONTROLLED, APPLY TOURIQUET	A. Apply as per tourniquet skill sheet

External Bleeding

PROCEDURES

To Control: 1st: direct pressure

2nd: elevation & direct pressure

3rd: pressure point Last Resort: Tourniquet

Internal Bleeding

- *1. Monitor breathing and pulse
- 2. Keep patient still
- *3. Loosen restrictive clothing
- 4. Be alert if patient vomits
- 5. Nothing by mouth
- 6. Report possibility of internal bleeding as soon as EMS personnel arrive on scene

29

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

TOURNIQUET

PROCEDURES CRITICAL SKILL

<u> </u>	
1. DETERMINE NEED FOR USING TOURNIQUET	 If these conditions are met, a tourniquet may be the only alternative: A. Direct pressure has not been successful in stopping bleeding B. Elevation of wound above heart has not been successful in stopping of bleeding C. Compression of pressure point has not been successful in stopping of bleeding.
2. SELECT APPROPRIATE MATERIALS	A. Select a band that will be between 3-4 inches in width and can be wrapped six or eight layers deep for improvised tourniquet or select factory tourniquet.
3. APPLY TOURNIQUET	 Factory Tourniquet A. Wrap band around the extremity proximal to the wound (one inch above but not on a joint) Improvised Tourniquet B. Apply a bandage around the extremity proximal to the wound (one inch above but not on a joint) and tie a half knot in the bandage C. Place a stick or pencil on top of the knot and tie the ends of the bandage over the stick in a square knot D. Twist the stick until the bleeding is controlled, secure the stick in position
4. APPLY PRESSURE	A. Do not cover the tourniquet *B. Notify other medical personnel caring for the patient
5. MARK PATIENT APPROPRIATELY	A. Mark a piece of tape on the patient's forehead "TQ" and time applied
6. REASSESS	*A. Assess level of consciousness, respiratory status, and patient response

30

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

DRESSINGS AND BANDAGING - OPEN WOUNDS

PROCEDURES

CRITICAL SKILL

1. EMERGENCY CARE FOR AN OPEN WOUND	 *A. Expose wound *B. Clear wound surface *C. Control bleeding *D. Prevent further contamination E. Bandage dressing in place after bleeding has been controlled F. Keep patient lying still
2. APPLY DRESSING	A. Use sterile dressingB. Cover entire woundC. Control bleedingD. Do not remove dressing
3. APPLY BANDAGE	 A. Do not bandage too tightly B. Do not bandage too loosely C. Do not leave loose ends D. Cover all edges of dressing E. Do not cover tips of fingers and toes, unless they are injured F. Bandage from the bottom of the limb to the top (distal to proximal) if applicable

Impaled Objects

- *1. Do not remove
- 2. Expose wound
- 3. Control bleeding
- 4. Stabilize with a bulky dressing; criss-cross the layers
- 5. Tie 4in. wide cravats around to hold in place, or tape in place
- *6. Check for exit wound
- 7. Immobilize affected area

Impaled Objects in the Cheek

- *1. Examine; inside & outside
- 2. If end not impaled in mouth pull it out
- 3. Position head for drainage: if spinal injury, immobilize 1st and tilt board
- 4. Dress outside of wound
- *5. Gauze on inside only if patient alert, (Simulate only in contest and state, "I would leave 3-4 inches of gauze outside of mouth.")

31

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

<u>Impaled Objects in the Eye</u>

- 1. Stabilize with 3 inch gauze or folded 4x4
- 2. Put cup (no Styrofoam) over object and allow cup to rest on roller gauze or 4x4
- 3. Secure cup with roller gauze (not over top of cup)
- *4. Cover uninjured eye too

Open Neck Wound (Serious or Life Threatening)

- *1. Gloved hand over wound
- *2. Occlusive dressing over wound- 2 inches larger than wound site
- 3. Gauze dressing over occlusive
- 4. Place roller gauze beside site and wrap around figure 8 under opposite arm

Abdominal Injury

*1. Place on back with legs flexed at the knees (for closed or open wounds)

Additional Steps for Open Abdominal Wounds (Serious or Life Threatening)

- *1. Apply moist dressing, then an occlusive dressing
- *2. Cover the occlusive with pads or a towel for warmth
- *3. If an object is impaled in abs, stabilize it and do not flex legs- leave them in the position you found them.

Skull Fractures and Brain Injuries

- *1. Open airway with jaw thrust
- 2. Apply collar
- *3. Use loose gauze dressing- no direct pressure
- *4. Keep at rest, ask them questions
- 5. Don't elevate legs (on or off a backboard)
- 6. After entire body is immobilized-tilt back board, injured side down

Amputations

- *1. Wrap in slightly moistened sterile dressing
- 2. Place in plastic bag or wrap in plastic
- *3. Keep part cool avoid freezing
- *4. Do not place in water or direct contact with ice
- *5. Transport with patient
- 6. Label with patients name

NOTE:

Triangular slings are required for all wounds of upper extremities, including shoulder and armpit wounds. Slings will not be required for upper extremity burns. However, if a burn and wound and/or fracture/dislocation are present on the same upper extremity, a sling shall be applied. Slings will be applied on upper extremities with injuries after all injuries of the extremity have been treated. (Page # 9 rule #24)

32

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

TWO-PERSON LOG ROLL

PROCEDURES CRITICAL SKILL

1. STABILIZE HEAD	*A. Stabilize the head and neck
2. PREPARING THE PATIENT	 A. When placing patient on board place board parallel to the patient B. Kneel at the patient's shoulders opposite the board (if used) leaving room to roll the patient toward knees. Raise the patient's arm, if not injured (the one closer to the rescuer) above the patient's head
3. PREPARING THE RESCUER	A. Grasp the patient at the shoulder and pelvis areaB. Give instructions to bystander, if used to support
4. ROLLING THE PATIENT	A. While stabilizing the head, roll the patient toward the rescuer by pulling steadily and evenly at the shoulder and pelvis areasB. The head and neck should remain on the same plane as the torso
	C. Maintain stability by holding patient with one hand and placing board (if used) with otherD. Roll the body as a unit onto the board (if used) (board
	may be slanted or flat) E. Place the arm alongside the body

33

SPLINTING (RIGID) UPPER EXTREMITY FRACTURES AND DISLOCATIONS

PROCEDURES CRITICAL SKILL

1. CARE FOR FRACTURE	 *A. Check for distal circulation, sensation, and motor function Do not attempt to reduce dislocations (if applies)
2. IMMOBILIZING FRACTURE	 A. Selection of appropriate rigid splint of proper length B. Support affected limb and limit movement C. Apply appropriate padded rigid splint against injured extremity D. Place appropriate roller bandage in hand to ensure the position of function E. Secure splint to patient with roller bandage, handkerchiefs, cravats, or cloth strips F. Apply wrap distal to proximal *G. Recheck distal circulation, sensation, and motor function
3. SECURING WITH SLING	 A. Place sling over chest and under arm B. Hold or stabilize arm C. Triangle should extend behind elbow or injured side D. Pull sling around neck and tie on uninjured side E. Pad at the neck (except when C-Collar is present) F. Secure excess material at elbow G. Fingertips should be exposed *H. Check for motion and circulation
4. SECURING SLING WITH SWATHE	 A. Use triangle cravat B. Swathe is tied around chest and injured arm *C. Reassess distal circulation, sensation, and motor function

34

^{*} Teams may use the acronym "PMS" when checking pulse, motor function and sensory function

ELBOW (STRAIGHT POSITION)

Follow Procedures No. 1 and No. 2 above

FINGER/FINGERS

Immobilize Fracture

- Tape injured finger to an adjacent uninjured finger; or
- 2. Tape injured finger to a tongue depressor, aluminum splint, or pen and pencil
- 3. Secure with sling and swathe

COLLAR BONE

Support and limit movement of affected area Follow Procedures No. 1, No. 3 and No. 4 above

SHOULDER BLADE

Support and limit movement of affected area Follow Procedures No. 1, No. 3 and No. 4 above

NOTE: Do not reposition dislocations

35

SPLINTING (SOFT) UPPER EXTREMITY FRACTURES AND DISLOCATIONS (WRIST AND HAND)

PROCEDURES CRITICAL SKILL

TROCEDURES		CMTICAL SIGEL
1.	CARE FOR FRACTURE	 *A. Check for distal circulation, sensation, and motor function Do not attempt to reduce dislocations (if applies)
		A. Support affected limb and limit movementB. Place two cravats (triangular bandage) under wrist/hand
2.	IMMOBILIZING FRACTURE	C. Place pillow length wise under wrist/hand, on top of cravats (pillow should extend past fingertips)
		D. Lower limb, adjust cravats to tie
		E. Tie cravats distal to proximal
		A. Place sling over chest and under arm
	SECURING WITH	B. Hold or stabilize arm
3.		C. Triangle should extend behind elbow or injured
	SLING	side
		D. Secure excess material at elbow
		E. Fingertips should be exposed
		*F. Check for motion and circulation
		A. Use triangle cravat
4.	SECURING SLING	B. Swathe is tied around chest and injured arm
	WITH SWATHE	*C. Reassess distal circulation, sensation, and motor
		function

36

SPLINTING (RIGID OR SOFT) PELVIC GIRDLE, THIGH, KNEE, AND LOWER LEG

PROCEDURE CRITICAL SKILL

1. DETERMINE NEED FOR SPLINTING	*A. Assess for: Pain Swelling Deformity B. Determine if splinting is warranted
2. APPLY MANUAL STABILIZATION	A. Support affected limb and limit movementDo not attempt to reduce dislocations
3. SELECT APPROPRIATE SPLINT	A. Select appropriate splinting method depending on position of extremity and materials availableB. Select appropriate padding material
4. PREPARE FOR SPLINTING	 A. Remove or cut away clothing as needed *B. Assess PMS distal to the injury: Pulse Motor Function Sensory Function C. Cover any open wounds with sterile dressing and bandage D. Measure splint E. Pad around splint for patient comfort

37

	A. Maintain support while splinting
	Living Splint:
	A. Immobilize the site of the injury B. Carefully place a pillow or folded blanket between the patients knees/legs
	C. Bind the legs together with wide straps or cravats
	D. Carefully place patient on long spine board E. Secure the patient to the long spine board
	Padded Board Splint:
	A. Splint with two long padded splinting boards (one should be long enough to extend from the patient's armpit to beyond the foot. The
5. SPLINT	other should extend from the groin to beyond the foot.) (Lower leg requires boards to
	extend from knee to below the foot.) B. Cushion with padding in the armpit and groin and all voids created at the ankle and knee
	C. Secure the splinting boards with straps and
	cravats D. Carefully place the patient on long spine board
	E. Secure the patient to the long spine board
	Other Splints:
	A. Immobilize the site of the injury B. Pad as needed
	C. Secure to splint distal to proximal
	D. Carefully place patient on long spine boardE. Secure the patient to the long spine board
6. REASSESS	*A. Reassess PMS *B. Assess patient response and level of comfort

38

SPLINTING (SOFT) LOWER EXTREMITY FRACTURES AND DISLOCATIONS (ANKLE AND FOOT)

PROCEDURES CRITICAL SKILL

THE CLE CILLS		CHITCHEOREE	
1.	CARE FOR FRACTURE	 *A. Check for distal circulation, sensation, and motor function Do not attempt to reduce dislocations (if applies) 	
		A. Support affected limb and limit movement	
	IMMOBILIZING FRACTURE	B. Place three cravats (triangular bandage) under	
		ankle/foot	
		C. Place pillow length wise under ankle/foot, on	
2.		top of cravats (pillow should extend 6 inches	
		beyond foot)	
		D. Lower limb, adjust cravats to tie	
		E. Tie cravats distal to proximal	
		F. Elevate with blanket or pillow	
		*G. Reassess distal circulation, sensation, and motor	
		function	

39

SPLINTING UPPER EXTREMITY/LOWER EXTREMITY FRACTURES (AIR SPLINT)

PROCEDURES CRITICAL SKILL

1. CARE FOR FRACTURE	*A. Check for motion and circulation (fingers/toes)
2. IMMOBILIZE FRACTURE	 A. Grasp above and below the injury site B. Maintain support C. Properly apply air splint D. Splint should be relatively free of wrinkles E. Inflate splint to point that slight dent can be made *F. Reassess circulation (fingers/toes)
3. MONITOR AIR- INFLATED SPLINT	*A. Periodically check for increase or decrease in pressure *B. Monitor pressure in splint with finger tip C. Make sure desired pressure is maintained *D. Reassess circulation (fingers/toes)

NOTE: Air splints may not be used with open (protruding bones) fractures. Air splints may only be used on the lower part of the extremities (from below the elbow on the arm and below the knee to the leg).

40

SPLINTING - FLAIL CHEST

PROCEDURES CRITICAL SKILL

-	DETERMINE NEED FOR SPLINTING	*A.	Assess for: • Pain • Swelling • Deformity Determine if splinting is warranted
	SELECT APPROPRIATE SPLINTING MATERIAL	A.	Choose a pillow, blanket, trauma dressing, or other appropriate splinting material
	PREPARE FOR SPLINTING	*A. B.	Remove or cut away clothing as needed. Cover any open wounds with sterile dressing and bandage
4.	APPLY SPLINT	A. B. C. D.	Affix splint to chest with adhesive tape or roller bandage Immobilize the site of injury Use caution when taping splint to chest circumferentially Ensure sufficient chest expansion
5.	REASSESS	*A.	Assess patient response and level of comfort
	ASSIST VENTILATIONS	A.	Assist with ventilation as needed

41

^{*} Teams may use the acronym "PMS" when checking pulse, motor function and sensory function

ONE RESCUER BLANKET DRAG

PROCEDURES	CRITICAL SKILL

1. VICTIM SUPINE ON GROUND	 A. Properly prepare blanket for use in blanket drag B. Spread blanket along side patient with approximately one half the width gathered lengthwise into pleats
2. POSITION PATIENT	 A. Properly roll victim on one side B. Take patients arm on side of body opposite to blanket and extend arm over head C. Support head and neck roll patient on side away from Blanket
3. PLACE PATIENT ON BLANKET	 A. Properly position on blanket B. Hold patient on side while pleated portion of blanket is pulled in close to victim's back C. Roll patient onto blanket, extend opposite arm and roll onto opposite side D. Smooth out pleats and roll patient onto back E. Snugly wrap patient in blanket with arms at sides
4. PREPARE TO DRAG PATIENT	A. Proper blanket drag of patientB. Grasp portion of blanket beneath victim's head and drag victim to safety

42

TWO RESCUER EXTREMITY GROUND LIFT

PROCEDURES	CRITICAL SKILL		
1. POSITIONING		 A. Rescuer 1 - Kneel at the head of the patient and place one hand under each of the shoulders B. Rescuer 2 - Kneel by the patients knees and grasp the patient's wrist 	
2. RAISING PATIENT TO A SITTING POSITION		 A. Rescuer 1 – push patient's shoulders up and support patient's back and head with body B. Rescuer 2 – Gently pull on patient's arms 	
3. POSITIONING AND LIFTING		 A. Rescuer 1 – Support patient in sitting position B. Rescuer 2 – Slip hands under the patient's knees C. On command, rescuers stand simultaneously, lifting patient with proper body mechanics 	

43

SHIRT DRAG

PROCEDURES CRITICAL SKILL 1. POSITIONING A. Rescuer - Kneel at the head of the patient and place one hand under each of the shoulders A. Rescuer - Grasp shirt at the shoulder area B. Drag patient in a straight line (keep spine as straight as possible)

44

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

ESTABLISHING AIRWAY-SUSPECTED CERVICAL SPINE (NECK) INJURY

PROCEDURES		CRITICAL SKILL
1. STABILIZE HEAD		 A. Rescuer - Position at top of the victim's head B. Restrain victim's head and neck to avoid voluntary or involuntary movement/rotation of the neck
2. ESTABLISH AIRWAY		A. Use modified jaw thrust maneuver without causing over-extension of victim's neck
3. CHECK FOR BREATHING		A. Look, listen and feel for breathing (3-5 seconds)B. State that the victim is/is not breathing
4. MAINTAIN OPEN AIRWAY		A. Do not compromise suspected neck injury

45

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

SHOCK

CRITICAL SKILL

*D. Reassure and calm the patient

PROCEDURES

*A. Check for pale (or bluish) skin (in victim with dark skin examine inside of mouth and 1. CHECK FOR AND nailbeds for bluish coloration. SYMPTOMS OF SHOCK *B. Check for cool, clammy skin *C. Check for weakness A. Keep victim lying down B. Cover with blanket to prevent loss of body heat \Box and place a blanket under the patient. (Do not try to place blanket under patient with possible 2. TREATMENT spinal injuries) C. Elevate according to injury

Option 1: Elevate the lower extremities or foot end of the back board. This procedure is performed in most cases. Place the patient flat, face up and elevate the legs or foot end of the back board 8 to 12 inches. Do not elevate any limbs with possible fractures or pelvic injuries until they have been properly splinted. Remember to consider the mechanism of injury for every patient.

П

Option 2: Lay the patient flat, face up. This is the supine position, used for patients with a spinal injury and patients who have serious injuries to the extremities that have not been supported. If the patient is placed in this position, you must constantly be prepared for vomiting.

Option 3: Slightly raise the head and shoulders. This position should be used only for responsive patients with no spinal injuries, life threatening chest or abdominal injuries and only for patients having difficulty breathing, but who have an open airway. A semi-seated position can also be used for patients with a history of heart problems. It is not recommended for moderate to severe cases of shock. Be certain to keep the patient's head from tilting forward.

Note: Injuries requiring the injured side to be tilted or placed down may be done after patient has been properly secured to a back board if a back board is required.

46

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

IMMOBILIZATION - LONG SPINE BOARD (Backboard)

PROCEDURES CRITICAL SKILL

	A. One First Aid Provider at the head must maintain in-line immobilization of the head and
	spine B. First Aid Provider at the head directs the
	movement of the patient C. Other First Aid Provider control movement of the rest of body
	D. Other First Aid Provider position themselves on same side
MOVE THE PATIENT ONTO THE LONG	E. Upon command of First Aid Provider at the head, roll patient onto side toward First Aid Providers
SPINE BOARD	F. Quickly assess posterior body, if not already done
	G. Place long spine board next to the patient with top of board beyond top of head
	H. Place patient onto the board at command of the First Aid Provider at head while holding in-line
	immobilization using methods to limit spinal movement
	I. Slide patient into proper position using smooth coordinated moves keeping spine in alignment
2. PAD VOIDS BETWEEN	A. Select and use appropriate padding
PATIENT AND LONG SPINE BOARD	B. Place padding as needed under the headC. Place padding as needed under torso
3. IMMOBILIZE BODY TO THE LONG SPINE BOARD	A. Strap and secure body to board ensuring spinal immobilization, beginning at shoulder and working toward feet
4. IMMOBILIZE HEAD	A. Using head set or place rolled towels on each side of head
TO THE LONG SPINE BOARD	B. Tape and/or strap head securely to board, ensuring cervical spine immobilization
5. REASSESS	*A. Reassess PMS (Pulse, Motor, Sensory) *B. Assess patient response and level of comfort

47

^{*} Teams may use the acronym "PMS" when checking pulse, motor function and sensory function

IMMOBILIZATION OF CERVICAL SPINE

PROCEDURES CRITICAL SKILL A. Place head in a neutral, in-line position unless patient complains of pain or the head is not easily moved into position 1. ESTABLISH AND B. Place head in alignment with spine IN-LINE П **IMMOBILIZATION** C. Maintain constant manual in-line immobilization until the patient is properly secured to a backboard with head immobilized *A. Assess PMS in all extremities: Pulse 2. ASSESS PMS Motor function Sensory function *A. Inspect and palpate for injuries or signs of injuries 3. ASSESS CERVICAL using: DOTS acronym REGION AND NECK B. Remove clothing or jewelry as necessary 4. BANDAGE ANY A. Any neck wounds WOUND A. Apply properly sized collar or manual immobilization One piece C-collar A. Select proper sized collar B. Apply collar C. Ensure that patient's head is not twisted during application 5. APPLY CERVICAL D. Ensure airway is open after placement **SPINE IMMOBILIZATION** Two piece C-collar A. Select proper sized collar П B. Apply rear section to back of neck П C. Center rigid support on spine П D. Apply front section (overlaps rear section) E. Ensure chin rests in chin cavity Secure collar with Velcro straps

48

Ensure airway is open after placement

^{*} Teams may use the acronym "PMS" when checking pulse, motor function and sensory function

6. SECURE HEAD TO APPROPRIATE IMMOBILIZATION DEVICE	 A. Immobilize patient to appropriate immobilization device B. Use head set or place rolled blankets or towels on each side of head C. Tape head securely to appropriate immobilization Device
7. REASSESS	*A. Reassess PMS *B. Assess patient response and level of comfort

49

BURNS

PROCEDURES

CRITICAL SKILLS

1. DETERMINE BURN TYPE	*A.	Determine type Thermal Chemical Electrical
2. DETERMINE BODY SURFACE AREA	*A.	Determine Body Surface Area (BSA) using rule of nines
	*A.	Remove patient from source of burn and prevent further contamination
	В.	Consider the type of burn and stopping the burning process initially with water or saline if appropriate
	*C.	Cut off smoldering clothing
3. BURN CARE (All Types)	*D.	Remove jewelry
	*E.	Continually monitor the airway for evidence of closure
	F.	Cover the burned area with a dry sterile
	dres	sing
	G.	Do not use any type of ointment, lotion or antiseptic
	H.	Do not break blisters
	I.	Ensure patient does not get hypothermic
4. CARE FOR CHEMICAL BURNS	A.	Protect yourself from exposure to hazardous materials
	В.	Wear gloves, eye protection, and respiratory protection
	C.	Brush off dry powders
	*D.	Consider to flushing with large amounts of
		water
	*E.	Continue flushing the contaminated area while en route to the receiving facility
	*F.	Use caution not to contaminate uninjured areas when flushing

50

NOTE: Each critical skill identified with an asterisk (*) shall be clearly verbalized by the team as it is being conducted. After initially stating what DOTS stands for, the team may simply state "DOTS" when making their checks.

5. CARE FOR ELECTRICAL BURNS	*A.	Ensure safety before removing patient from the electrical source
	*B.	If the patient is still in contact with the electrical source or you are unsure, do not approach or
		touch the patient, contact power company
	*C.	Monitor the patient closely for respiratory and
		cardiac arrest
	D.	Treat the soft tissue injuries associated with the
		burn
	*E.	Look for both an entrance and exit wound
6. REASSESS	*A.	Reassess level of consciousness, respiratory
U. KEASSESS		status, and patient response

51

EARLY OR SUPERFICIAL FROSTBITE

PROCEDURES CRITICAL SKILLS

ASSESS FOR FROSTBITE AND COLD INJURIES	A. Patient exhibits signs and symptoms of frostbite or cold injuries
2. ASSESS FOR EARLY OR SUPERFICIAL FROSTBITE	 A. Blanching of the skin – palpitation of the skin in which normal color does not return B. Loss of feeling and sensation in the injured area C. Skin remains soft D. If re-warmed, patient will feel a tingling sensation
3. TREAT EARLY OR SUPERFICIAL INJURY	 *A. Remove the patient from the environment B. Protect the cold injured extremity from further injury *C. Remove wet or restrictive clothing D. Do not rub or massage E. Do not re-expose to the cold
4. REASSESS	*A. Reassess level of consciousness, respiratory status and patient response

52

LATE OR DEEP COLD INJURY

PROCEDURES

CRITICAL SKILLS

ASSESS FOR FROSTBITE AND COLD INJURIES	A. Patient exhibits signs and symptoms of frostbite or cold injuries
2. ASSESS FOR LATE OR DEEP COLD INJURY	 A. White, waxy skin B. Firm to frozen feeling upon palpitation C. If thawed or partially thawed, the skin may appear flushed with areas of purple and blanching or mottled and cyanotic D. Swelling may be present E. Blisters may be present
3. TREAT LATE OR DEEP COLD INJURY	 *A. Remove the patient from the environment B. Protect the cold injured extremity from further injury *C. Remove wet or restrictive clothing D. Remove jewelry E. Cover with dry clothing or dressings F. Do not: Break blisters Rub or massage area Apply heat Re-warm Allow the patient to walk on the affected extremity
4. REASSESS	*A. Reassess level of consciousness, respiratory status and patient response

53

MILD HYPERTHERMIA (HEAT)

PROCEDURES CRITICAL SKILL

1. ASSESS FOR HYPERTHERMIA	 A. Patient exhibits signs and symptoms of hyperthermia: Redness Muscular cramps Weakness or exhaustion Rapid heart rate Dizziness or faintness Altered mental status to unresponsive
2. PREVIOUS INTERVENTIONS	A. Inquire about previous interventions attempted
3. ASSESS FOR MILD HYPERTHERMIA (HEAT EXHAUSTION)	*A. Check skin for: Normal to cool temperature Pale Moist
4. TREATMENT FOR MILD HYPERTHERMIA	 *A. Remove patient from hot environment and place in a cool environment *B. Loosen or remove clothing *C. Cool patient by fanning D. Put in supine position with legs elevated E. Offer drinking water if patient is responsive and not nauseated F. If the patient is unresponsive or is vomiting, transport to the hospital
5. REASSESS	*A. Reassess level of consciousness, respiratory status and patient response

54

^{*} Teams may use the acronym "PMS" when checking pulse, motor function and sensory function

SEVERE HYPERTHERMIA

PROCEDURES CRITICAL SKILL

ASSESS FOR HYPERTHERMIA	 A. Patient exhibits signs and symptoms of hyperthermia: Redness Muscular cramps Weakness or exhaustion Rapid heart rate Dizziness or faintness Altered mental status to unresponsive
2. PREVIOUS INTERVENTIONS	A. Inquire about previous interventions attempted
3. ASSESS FOR SEVERE HYPERTHERMIA (HEAT STROKE)	*A. Check skin for: Hot temperature Red Dry or moist
4. TREATMENT FOR SEVERE HYPERTHERMIA	*A. Place patient in a cool environment *B. Remove clothing *C. Wet patient skin by applying water from sponge or wet towels and fan *D. Put in supine position with legs elevated *E. Offer drinking water if patient is responsive and not nauseated *F. Apply cool packs to neck, groin and armpits *G. Transport immediately
5. REASSESS	*A. Reassess level of consciousness, respiratory status and patient response

55

^{*} Teams may use the acronym "PMS" when checking pulse, motor function and sensory function